

CLAIMS

1. A method in a Radio Network Controlling unit in a mobile
5 telecommunication network for including a detected set cell, i.e. a cell not
identified by the network, in an active set, i.e. the set comprising the
base stations simultaneously connected to the same mobile terminal in
soft handover, the method is **characterised in** that it comprises the
steps of:
10 -receiving (301) a measurement report comprising a detected set cell from
a mobile terminal located in a first cell;
-providing (302) a list (L1) for the first cell in the network with cells not
defined as neighbouring cells to the first cell, wherein the cells in the list
(L1) are grouped based on their scrambling codes;
15 -identifying (303) the scrambling code of the detected set cell;
-creating (304) a temporary relation between one of the cells in the list
(L1), having an identical scrambling code as the detected set cell, and one
cell in the AS;
-adding (305) the one of the cells in the list (L1), having an identical
20 scrambling code as the detected set cell, to the active set.
2. The method according to claim 1, wherein the temporary relation is
created between a cell in the list (L1) having an identical scrambling
code as the strongest detected set cell, and one cell in the AS.
- 25 3. The method according to any of claims 1-2, wherein it comprises the
further steps of:
-determining if the added cell in the list (L1) corresponds to the detected
set cell by performing uplink synchronisation; and if uplink
30 synchronisation is achieved
-confirming that the detected set cell is the added cell of list L1 and the
method comprises the further steps of:
-converting the temporary relation into a permanent relation, and

-removing the added cell from the list L1, and if uplink synchronisation is not achieved:

-putting the added cell in a specific position of the list L1.

- 5 4. The method according to claim 3, wherein the method comprises the further step of:
- informing the mobile terminal in soft handover about the added cell to the active set by transmitting a message comprising the scrambling code of the cells in the active set.

10

5. A computer program product directly loadable into the internal memory of a computer within a Radio Network Controlling unit in a telecommunication system, comprising the software code portions for performing the steps of any of claims 1-4.

15

6. A computer program product stored on a computer usable medium, comprising readable program for causing a computer, within a Radio Network Controlling unit in a telecommunication system, to control an execution of the steps of any of the claims 1-4.

20

7. A Radio Network Controlling unit in a mobile telecommunication network adapted for including a detected set cell, i.e. a cell not identified by the network, in an active set, i.e. the set comprising the base stations simultaneously connected to the same mobile terminal in soft handover,
- 25 the RNC is **characterised in** that it comprises means for receiving a measurement report comprising a detected set cell from a mobile terminal located in a first cell; means for providing a list (L1) for the first cell in the network with cells not defined as neighbouring cells to the first cell, wherein the cells in the list (L1) are grouped based on their
- 30 scrambling codes; means for identifying the scrambling code of the detected set cell; means for creating a temporary relation between one of the cells in the list (L1), having an identical scrambling code as the detected set cell, and one cell in the AS; and means for adding the one of

the cells in the list (L1), having an identical scrambling code as the detected set cell, to the active set.

- 5 8. The Radio Network Controlling unit according to claim 7, wherein it comprises means for creating the temporary relation between a cell in the list (L1) having an identical scrambling code as the strongest detected set cell, and one cell in the AS.
- 10 9. The Radio Network Controlling unit according to any of claims 7-8, wherein it further comprises means for determining if the added cell in the list (L1) corresponds to the detected set cell by performing uplink synchronisation; and if uplink synchronisation is achieved means for confirming that the detected set cell is the added cell of list L1 and the Radio Network Controlling unit comprises the further means for
- 15 converting the temporary relation into a permanent relation, and means for removing the added cell from the list L1, and if uplink synchronisation is not achieved means for putting the added cell in a specific position of the list L1.
- 20 10. The Radio Network Controlling unit according to claim 9, wherein it further comprises means for informing the mobile terminal in soft handover about the added cell to the active set by transmitting a message comprising the scrambling code of the cells in the active set.